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EXAMINER				
MORRISON, THOMAS A				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/577,202

Applicant(s)

GROGOR ET AL.

Examiner

THOMAS A. MORRISON

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF 298)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 2-3 and 6-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 depends from claim 1. Claim 1 recites "conveyor belts". After this, claim 2 recites "conveyor belts receiving the mailings" and then "transferring conveyor belts". It is unclear if the recited "conveyor belts receiving the mailings" in claim 2 are the same or different from the previously recited "conveyor belts" in claim 1. Likewise, it is unclear if the recited "transferring conveyor belts" in claim 2 are the same or different from the previously recited "conveyor belts" in claim 1. In other words, it is unclear how many different conveyor belts are claimed in claim 2.

Claim 3 depends from claim 1. Claim 1 recites "conveyor belts". After this, claim 3 recites "receiving conveyor belts" and then "the conveyor belts". It is unclear if the recited "receiving conveyor belts" in claim 3 are the same or different from the previously recited "conveyor belts" in claim 1. Likewise, it is unclear which conveyor belts are referred to by the recited "the conveyor belts" in claim 3. Does the recited "the conveyor belts" in claim 3 refer to the previously recited "receiving conveyor belts" in claim 3 or the previously recited "conveyor belts" in claim 1. In other words, it is unclear how many different conveyor belts are claimed in claim 3.

Claim 6 depends from claim 5, which ultimately depends from claim 1. Claim 1 recites "conveyor belts". After this, claim 6 recites "a receiving conveyor belt". It is unclear if the recited "a receiving conveyor belt" in claim 6 is the same or different from the previously recited "conveyor belts" in claim 1. In other words, it is unclear how many different conveyor belts are claimed in claim 6.

Claim 7 depends from claim 3, which ultimately depends from claim 1. Claim 1 recites "conveyor belts". After this, claim 7 recites "a receiving conveyor belt". It is unclear if the recited "a receiving conveyor belt" in claim 7 is the same or different from the previously recited "conveyor belts" in claim 1. In other words, it is unclear how many different conveyor belts are claimed in claim 7.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,372,925 (De Vries et al.) (hereinafter "De Vries")(cited in the 12/26/06 IDS).

Regarding claim 1, Figs. 1-5 show a device for singulating overlapping flat mailings in an upright position in a path of travel with several singulating sections (one singulating section adjacent element 60 and one singulating section adjacent element 64) arranged along the path of travel, with each singulating section (one singulating

section adjacent element 60 and one singulating section adjacent element 64) having conveyor belts (20, 72 and 73) spaced apart from each other and above each other and transporting the mailings, and at an opposite side of the path of travel retaining elements (Fig. 5) acting on the mailings with a friction force and at a height between the conveyor belts (20, 72 and 73), wherein a speed of travel of the conveyor belts (72 and 73) in each singulating section is higher than the speed of travel of the conveyor belts (20) of the respective singulating section (singulating section adjacent element 60) upstream in the direction of travel, individually mounted deflection rollers (including 26 and 32) of the conveyor belts (20, 72 and 73) of both adjacent singulating sections are arranged at different heights along a common axis (34) at each transition between the singulating sections.

Regarding claim 4, Figs. 1-5 show that at each transition between the singulating sections (one singulating section adjacent element 60 and one singulating section adjacent element 64) a receiving area of the downstream singulating section (one singulating section adjacent element 64) has one conveyor belt (72 and 73) more than a transferring area of the upstream singulating section (one singulating section adjacent element 60), wherein center singulating sections (one singulating section adjacent element 60 and one singulating section adjacent element 64) each have two conveyor belt areas, with drive belts (20, 72 and 73) being coupled by means of a common wide coupling roller (32) and with the conveyor belt area (near 72 and 73) receiving the particular mailings having one conveyor belt more than a transferring conveyor belt area (near 20) in these singulating sections.

Regarding claim 6, col. 3, line 37 discloses a drive motor of the conveyor belt (20) of each of the upstream singulating sections (one singulating section adjacent element 60) in the direction of travel can be switched off or reduced in speed if the mailing arriving in the respective downstream singulating section has achieved a speed of a receiving conveyor belt, and the switch-off or reduction persists until a clearance between the mailings, specified for each singulating section, has been determined by means of a line of light barriers arranged along the path of travel.

Regarding the recitation "a drive motor of the conveyor belt of each of the upstream singulating sections (one singulating section adjacent element 60) in the direction of travel can be switched off or reduced in speed if the mailing arriving in the respective downstream singulating section has achieved a speed of a receiving conveyor belt in claim 6, and the switch-off or reduction persists until a clearance between the mailings, specified for each singulating section, has been determined by means of a line of light barriers arranged along the path of travel in claim 6, the bolded portion of this recitation includes "conditional limitations" that need not ever occur. For example if the mailing arriving in the respective downstream singulating section never achieves a speed of a receiving conveyor belt, there is no requirement whatsoever for the drive motor of the conveyor belt to be switched off or reduced in speed at all. The broadest reasonable interpretation of claim 6 is that the conditional limitation is never met and that there is no switching off or reduction in speed of the drive motor whatsoever. As such, all of the limitations of claim 6 are met by De Vries.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Vries as applied to claim 1 above, and further in view of U.S. Patent No. 5,238,236 (Belec et al.) (hereinafter "Belec"). Regarding claim 2, De Vries shows one conveyor belt (20) receiving the mailings and transferring conveyor belts (72 and 73). As such, De Vries does not explicitly disclose conveyor belts receiving the mailings, and does not explicitly disclose that such conveyer belts have a higher coefficient of friction than respective transferring conveyor belts, as claimed.

Belec discloses that it is well known in the art to provide a device for singulating overlapping flat mailings with a plurality of conveyor belts (42) receiving mailings, for the purpose of ensuring that such mailings are properly fed away from remaining mailings in a stack. See, e.g., Figs. 1-2 of Belec. Moreover, Belec discloses that it is well known in the art to select conveyor belts (42) receiving the mailings with a higher coefficient of friction than respective transferring conveyor belts (86 and 84), for the purpose of ensuring that such mailings are properly fed away from remaining mailings in a stack. See, e.g., col. 8, lines 44-50 of Belec. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of De Vries with a plurality of conveyor belts receiving the mailings and to make the coefficient of

friction of such belts higher than the transferring conveyer belts (72 and 73) of De Vries for the purpose of ensuring that such mailings are properly fed away from remaining mailings in the stack of De Vries. Thus, all of the limitations of claim 2 are met by this combination of references.

4. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Vries as applied to claim 1 above, and further in view of U.S. Patent No. 3,847,383 (Wojtowicz et al.) (hereinafter "Wojtowicz"). Regarding claim 3, De Vries discloses most of the features of this claim including a receiving conveyor belt (20) in a receiving area (near 64), but De Vries does not explicitly disclose multiple receiving conveyor belts, as claimed. Also, De Vries does not explicitly disclose that the mailings are arranged at vacuum chambers pulling such conveyor belts, as claimed.

Wojtowicz discloses that it is well known in the art to provide a device for singulating overlapping flat mailings with a plurality of receiving conveyor belts (18) in a receiving area and vacuum chambers (Figs. 1 and 2) pulling on such conveyor belts (18), because such belt and vacuum chamber arrangement of Wojtowicz virtually eliminates double-feeding by multiple restraint schemes. See, e.g., Abstract and Figs. 1-2 of Wojtowicz. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide that apparatus of De Vries with a plurality of receiving conveyor belts and vacuum chambers pulling on such conveyor belts, because such belt and vacuum chamber arrangement virtually eliminates double-feeding by multiple restraint schemes, as explicitly taught by Wojtowicz. Thus, all of the limitations of claim 3 are met by the combination of references.

Regarding claim 7, a vacuum of the vacuum chamber (Figs. 1 and 2) of each singulating section upstream in the direction of travel can be switched off or reduced if the corresponding mailing arriving in a succeeding singulating section has reached a speed of a receiving conveyor belt and the switch-off and or reduction persists until a clearance between the mailings, specified for each singulating section, is determined by means of a line of light barriers arranged along the path of travel" in claim 7, the bolded portion of this recitation includes "conditional limitations" that need not ever occur. For example if the mailing arriving in the respective downstream singulating section **never achieves a speed of a receiving conveyor belt**, there is no requirement whatsoever for the vacuum to be to be switched off or reduced. The broadest reasonable interpretation of claim 7 is that the conditional limitation is never met and that there is no switching off or reduction in the vacuum whatsoever. As such, all of the limitations of claim 7 are met by De Vries in view of Wojtowicz.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Vries as applied to claim 1 above, and further in view of Japanese Publication No. 2-8123 (hereinafter "JP'123"). De Vries discloses all of the limitations of claim 5, except for a measuring device, as claimed.

JP'123 discloses that it is well known in the art to provide a device for singulating overlapping flat mailings with a plurality of measuring devices (16a and 16b) in singulating sections for the purpose of detecting take out speed of mailings. See, e.g., Figs. 1-2 and the English abstract of JP'123. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of

De Vries with measuring devices in the singulating sections for the purpose of detecting the take out speed of mailings, as explicitly taught by JP'123.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Vries as applied to claim 1 above, and further in view of U.S. Patent No. 5,257,777 (Kalika et al.) (hereinafter "Kalika"). De Vries discloses most of the limitations of claim 8 including retaining elements (Fig. 5) including a roller (64) for holding back all but one document that is fed from a stack. However, De Vries does not disclose that such retaining elements are secured on an immovable belt, as claimed.

Kalika discloses that it is well known in the art to provide a device for singulating overlapping flat mailings with singulating sections (Fig. 1) arranged along a path of travel with each singulating section having conveyor belts (including 34 and 34) that feed one document of a stack of documents, and at an opposite side of the path of travel retaining elements (i.e., including elements 64 and 64 in Fig. 3 that are secured to fixed belts 96, 98 and 100) for frictionally engaging and holding back the advance of the remainder of documents in the stack. Because both De Vries and Kalika teach travel retaining elements for frictionally engaging and holding back the advance of all documents of a stack except for one document being fed, it would have been obvious to one skilled in the art to substitute the travel retaining elements of Kalika for the travel retaining elements of De Vries to achieve the predictable result of frictionally engaging and holding back the advance of all documents of a stack except for one document being fed. Thus, all of the limitations of claim 8 are met by this combination of references.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS A. MORRISON whose telephone number is (571)272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick H. Mackey/
Supervisory Patent Examiner, Art
Unit 3653

9/10/09